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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
PHAM, VAN T	

ART UNIT	PAPER NUMBER
2627	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/511,931	NARUMI ET AL.	
	Examiner	Art Unit	
	VAN T. PHAM	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,6,9,15-20,23-27,31,32,35,41-46 and 49-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5,6,9,15-20,23-27,31,32,35,41-46 and 49-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments filed 11/28/2007 have been fully considered but they are not persuasive.

2. Applicant's asserted, "Masui '079 discloses that the width and the output timing of a recording pulse are corrected according to the pulse length/blank length. Masui '079 in [0040] states that "data of the computed individual lengths Lo, L1, and L2 are inputted to the corrected value setting means 2, in which corrected values of the pulse width and the output timing of the recording pulse are set according to the recording pattern based on these data.

3. Applicant's asserted, "In Masui '079, correcting pulse width and output timing of the recording pulse are not the same thing as determining a correction accuracy of a recording pulse position, and as such, Masui '079 cannot anticipate claims 1 and 27. Another way to consider the differences is that Masui '079 corrects a recording pulse whereas Applicants claim a method that *determines a degree of accuracy of the correction- similar to the difference between determining the values of a function and determining a derivative of the function or the degree to which those values should be corrected*", which does not discloses in the Instant Application's Specification instead of

[0015] ..... Correction of the recording pulse position can mean either *correction of the edge position of the recording pulse*, or it can mean *correction of the position of the recording pulse itself.*

Masui '079 discloses *correcting an edge position of a recording mark* (see Masui '079 Abstract).

Applicant's asserted, "the machine/computer translation of Masui 'o79 [0038] and [0039] cited in the rejection is wrong. Applicants enclose a correct translation [0038] and [0039] of Masui '079 and in view of the correct translation", which is acknowledged.

Last but not least, Applicant's asserted, "Seo '759 and Morisugu '505 also do not determine a degree of correction accuracy based on information recording condition...", which is incorrect. Since Masui '079 discloses that limitation (see response above), neither Seo or Morisugu do not have to have all the limitations of Masui discloses.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 5, 6, 9, 23, 25-27, 31-32, 35, 49 and 51-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Masui Narihiro (JP 5234079).

Regarding claim 1, Masui Narihiro, see Figs. 1-3 and abstract, discloses an optical information recording method for recording information onto an optical information recording medium, the method comprising:

an identification step of identifying an information recording condition or information recording characteristics of the optical information recording medium (see abstract and Figs. 1-3, and [0037]-[0042]); and

a recording pulse correction step of correcting a recording pulse position, in order to form a recording mark in a predetermined position (see Figs. 1-3);

wherein in the recording pulse correction step, correction accuracy of the recording pulse position is determined to be any of a plurality of degrees of accuracies depending on the information recording conditions or the information recording characteristics that were identified in the identification step (see Figs. 1-3 and [0037]-[[0043], see response above).

Regarding claim 5, see Figs. 1-3, 6, discloses the optical information recording method according to claim 1, wherein an optical information recording medium that contains a control track region is used as the optical information recording medium (see Figs. 1) , the identification step further comprising: an identifier detection step of reproducing information from the control track region (see Figs. 1, 3, 6), and detecting an identifier that represents the information recording conditions or information recording characteristics of the optical information recording medium (see Fig. 2), from the information that is reproduced; wherein in the recording pulse correction step (see Figs. 2, element 2), the correction accuracy of the recording pulse position is differentiated according to the information recording conditions or information recording characteristics that are represented by the identifier detected in the identifier detection step (see Fig. 2).

Regarding claim 6, see Figs. 1-3, 6, discloses the optical information recording method according to claim 5, wherein the identifier that is detected in the identifier detection step is an identifier that represents a recording density of the optical information recording medium (see Fig. 1-3).

Regarding claim 9, see Figs. 1-3, 6, discloses the optical information recording method according to claim 5, wherein the identifier that is detected in the identifier

detection step is an identifier that represents a linear recording velocity of the optical information recording medium.

Regarding claim 23, see Figs. 1, 3, discloses the optical information recording method according to claim 1, wherein a process of recording onto the optical information recording medium is a mark edge recording process.

Regarding claim 25, see Figs. 1-3, 6, discloses the optical information recording method according to claim 1, wherein in the recording pulse correction step, the recording pulse position is corrected by changing a forward edge position of a front end pulse and a rear edge position of a back end pulse (see [0019]-[0033]).

Regarding claim 26, see Figs. 1-3, 6, discloses the optical information recording method according to claim 1, wherein in the recording pulse correction step, the recording pulse position is corrected by changing the actual position of a front end pulse and a back end pulse (see rejection above of claim 25).

Regarding claim 27, see rejection above of claim 1.

Regarding claim 31, see rejection above of claim 5.

Regarding claim 32, see rejection above of claim 9.

Regarding claim 35, see rejection above of claim 6.

Regarding claim 49, see rejection above of claim 23.

Regarding claim 51, see rejection above of claim 25.

Regarding claim 52, see rejection above of claim 26.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 15-20 and 41-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masui Narihiro (JP 5234079) in view of Seo (US 6,661,759).

Regarding claim 15, Masui discloses the optical information recording method according to claim 1, wherein in the recording pulse correction step (see Figs. 1-3), the recording pulse position is corrected amount of the recording pulse position is prescribed according to the correction accuracy (see [0043]).

Seo, see Fig. 7, discloses recording pulse position is using a correction table in which a correction amount of the recording pulse position is prescribed according to the correction accuracy (see cols. 1-3).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide recording pulse position is using a correction table in Masui as suggested by Seo, the motivation being in order to determine the correlativity between the length of a mark currently being recorded and the lengths of leading/trailing spaces (see Seo abstract).

Regarding claim 16, the combination of Masui and Seo, discloses the optical information recording method according to claim 15, wherein in the recording pulse correction step, a correction table is used in which the number of elements that prescribe the correction amount of the recording pulse position is greater when the correction accuracy is high than when the correction accuracy is low (see Seo Figs. 6-9, and cols. 14-15).

Regarding claim 17, the combination of Masui and Seo, discloses the optical information recording method according to claim 16, wherein in the recording pulse correction step, the number of elements in the correction table is substantially reduced when the recording accuracy is low, by setting the correction amount that is prescribed by a predetermined number of elements from among the plurality of elements contained in the correction table when the correction accuracy is high to be mutually equivalent (see Figs. 3, 6-9 and cols. 14-15).

Regarding claim 18, the combination of Masui and Seo, discloses the optical information recording method according to claim 15, the method further comprising: a step of generating the correction table by setting the value of the elements in accordance with the correction accuracy from the number of table elements and the correction resolution that are determined in advance (see Seo Table 1 and figs. 7-9 and col. 13-15).

Regarding claim 19, the combination of Masui and Seo, discloses the optical information recording method according to claim 15, wherein in the recording pulse correction step, one of the plurality of correction tables whose number of elements is mutually different, and which is determined in advance according to the correction accuracy, is selected and used (see Seo Table 1 and figs. 7-9 and col. 13-15).

Regarding claim 20, the combination of Masui and Seo, discloses the optical information recording method according to claim 19, wherein the plurality of correction tables that have different numbers of elements comprise: at least two selected from: (a) a correction table that prescribes uniform values that do not depend on the recording code length as the correction amount; (b) a correction table that prescribes values that depend on the recording code length as the correction amount; (c) a correction table that

prescribes values that depend on a combination of the recording code length and the pre-code length and on a combination of the recording code length and the post-code length (see Seo Figs. 6-7 and cols. 1-4).

Regarding claims 41-46, see rejection above of claims 15-20, respectively.

8. Claims 24 and 50 rejected under 35 U.S.C. 103(a) as being unpatentable over Masui Narihiro (JP 5234079) in view of Muritsugu et al. (US 5,347,505).

Regarding claim 24, Masui discloses the optical information recording method according to claim 1, wherein a process of recording onto the optical information-recording medium is a pulse position recording process.

Moritsugu discloses a process of recording onto the optical information-recording medium is a mark position recording process (see Fig. 5).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a process of recording onto the optical information-recording medium is a mark position recording process in Masui as suggested by Moritsugu, the motivation being in order to remove thermal shift and pattern shift during the recording process (see Seo col. 4, lines 33-46).

Regarding claim 50, see rejection above of claim 24.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Cited References

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to optical recording medium having an area for recording a plurality of recording/reproducing conditions to be used in recording/reproduction apparatus and recording/reproduction method and apparatus thereof; and optical information recording medium and optical information recording and reproducing apparatus.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Thursday from 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

VP

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER